

We claim

1. In combination, a tube adapted to contain a fluid to be subjected to centrifugation and a separator disk in said tube adapted to separate components of said fluid having different specific gravities, said disk being made of a material having a specific gravity near the specific gravity of the components at an interface.

2. A combination according to claim 1 wherein said disk fits into said tube such that a gap is formed between the perimeter of said disk and the interior of said tube, said gap being of such a dimension that the component of said below said disk after separation will not flow through said gap at about 1G.

3. A combination according to claim 1 further comprising a shaft extending along said tube and engaging said disk such that said disk slides along said shaft.

4. A combination according to claim 1 wherein said disk is arranged to rotate about an axis transverse to the longitudinal axis of said tube to form a valve with the side of said tube during decanting.

5. A combination according to claim 4 further comprising a shaft extending along said tube and engaging said disk such that said disk slides along said shaft.

6. A combination according to claim 4 wherein said disk includes an upper outer edge and a lower outer edge and the transverse dimension between said upper outer edge and lower outer edge is greater than the internal diameter of said tube.

7. A combination according to claim 1 wherein the upper surface is curved.

8. A combination according to claim 7 wherein said upper surface is cylindrical.

9. A combination according to claim 1 wherein said disk is shaped such that its center of buoyancy is located above an upper surface of the disk.

10. A combination according to claim 9 wherein the specific gravity of said disk is such that its upper surface will lie just below an interface between plasma and red blood cells.

11. An article for use in preventing flow of a fluid from a tube, said article being generally disk shaped and having a raised edge portion such that the center of buoyancy of the article lies above an upper surface thereof.

12. A method for decanting a supernatant that has been separated from a fluid comprising the step of placing a floating separator disk in said fluid, separating said supernatant from said fluid, and decanting said supernatant wherein said separator disk automatically positions itself at or near the interface between said supernatant and the remaining components of said fluid.

13. A method according to claim 12 wherein said disk is adapted to restrict decant of said remaining components during decant of said supernatant.

14. A method according to claim 13 wherein said disk rotates during decant to a position wherein at least one edge of said disk engages a wall of a container having said fluid therein.

15. A method according to claim 13 wherein said disk forms a channel between an outer edge of said disk and an interior wall of a container having said fluid therein, said channel restricting flow of said remaining components during decant of said supernatant.

16. A method according to claim 13 wherein said disk assumes a position such that its upper surface is just below an interface between said supernatant and said remaining components.